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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,351	12/27/2000	Byoung Whi Kim	300055.481	8816
500	7590 01/25/2005	EXAMINER		INER
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC			Li, SHi K	
701 FIFTH AV SUITE 6300	VE .		ART UNIT	PAPER NUMBER
SEATTLE, W	/A 98104-7092		2633	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

· · ·		Application No.	Applicant(s)			
Office Action Summary		09/751,351	KIM ET AL.			
		Examiner	Art Unit			
		Shi K. Li	2633			
 Period for	The MAILING DATE of this communication ap	ppears n the c ver sheet with the c	correspondence address			
A SHOI THE M/ - Extensic after SI/ - If the pe - If NO pe - Failure to Any repi	RTENED STATUTORY PERIOD FOR REPLAILING DATE OF THIS COMMUNICATION ons of time may be available under the provisions of 37 CFR 1 (6) MONTHS from the mailing date of this communication, riod for reply specified above is less than thirty (30) days, a rejund for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statuly received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	. 136(a). In no event, however, may a reply be tirply within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠ R	esponsive to communication(s) filed on 04 (	October 2004.				
2a)⊠ T	his action is <b>FINAL</b> . 2b)☐ Thi	is action is non-final.	•			
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition	of Claims					
4a 5)⊠ C 6)⊠ C 7)⊠ C	laim(s) 1,2,4-6,9-11,17 and 19-24 is/are per 1) Of the above claim(s) is/are withdra laim(s) 1,2,4-6 and 9-11 is/are allowed. laim(s) 17 and 22-24 is/are rejected. laim(s) 19-21 is/are objected to. laim(s) are subject to restriction and/	awn from consideration.				
Application	Papers					
9)∐ <b>T</b> h	e specification is objected to by the Examin	er.				
10)∐ Th	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Al	oplicant may not request that any objection to the	e drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
	eplacement drawing sheet(s) including the correct e oath or declaration is objected to by the E		•			
Priority und	der 35 U.S.C. § 119					
12)	knowledgment is made of a claim for foreign All b) Some * c) None of:  Certified copies of the priority document Certified copies of the priority document Copies of the certified copies of the priority document application from the International Bureate the attached detailed Office action for a list	its have been received. Its have been received in Applicationity documents have been received au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)		0 🗆 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	(DTO 442)			
2)	f References Cited (PTO-892) f Draftsperson's Patent Drawing Review (PTO-948) ion Disclosure Statement(s) (PTO-1449 or PTO/SB/08 o(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da  5) Notice of Informal P 6) Other:				

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#### **DETAILED ACTION**

## Claim Objections

1. Claim 9 is objected to because of the following informalities: "n number of the transmitters" in line 13 of the claim should read "n number of transmitters". Appropriate correction is required.

2. Claim 20 is objected to because of the following informalities: "the  $\lambda$ -tag" in line 4 of the claim should read "a  $\lambda$ -tag". Appropriate correction is required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Doerr et al. (U.S. Patent 5,625,478).

Regarding claim 22, Doerr et al. discloses in FIG. 1A a ring network. FIG. 1A comprises four (4) terminals to which unique wavelengths  $\lambda 1$ - $\lambda 4$  are allocated respectively and a single controller (central office). Each terminal adds/drops its own assigned wavelength and the central office adds/drops all wavelengths. The central office contains an ATM switch which routes packets based on destination address.

Regarding claim 24, Doerr et al. teaches in FIG. 1A to use tap and local filter to add/drop its own assigned wavelengths.

Claim Rejections - 35 USC § 103

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- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al. (U.S. Patent 5,625,478) in view of Azizoglu et al. (U.S. Patent 6,430,201 B1).

Doerr et al. has been discussed above in regard to claim 22. The difference between Doerr et al. and the claimed invention is that Doerr et al. does not teach to temporarily store packets in a buffer. Azizoglu et al. suggests in FIG. 3 to use FIFO as buffers when multiplexing packets from several sources using TDM. One of ordinary skill in the art would have been motivated to combine the teaching of Azizoglu et al. with the ring network of Doerr et al. because storing packets in a FIFO resolves contention and avoids dropping packets. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use include buffers for storing packets, as taught by Azizoglu et al., in the ring network of Doerr et al. because storing packets in a FIFO resolves contention and avoids dropping packets.

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al. (U.S. Patent 5,625,478) in view of Chawki et al. (U.S. Patent 5,576,875).

Doerr et al. has been discussed above in regard to claim 22. The difference between Doerr et al. and the claimed invention is that Doerr et al. does not teach another ring network. Chawki et al. teaches in FIG. 2a multi-ring network wherein B0 is a main ring and B1, B2 and B3 are subrings. Headstation T connects a subring to the main ring. Headstation T differentiates traffic from different rings based on the interface (fiber) and differentiates traffic from different

terminals within a ring based on wavelength; two terminals on different ring can use the same wavelengths. One of ordinary skill in the art would have been motivated to combine the teaching of Chawki et al. with the ring network of Doerr et al. because Chawki et al. expands the network to serve more terminals by reusing wavelengths while only a limited number of wavelengths are available for practical use in WDM. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to expand the ring network of Doerr et al. to multi-ring network, as taught by Chawki et al., because Chawki et al. expands the network to serve more terminals by reusing wavelengths while only a limited number of wavelengths are available for practical use in WDM.

## Allowable Subject Matter

- 8. Claims 1-2, 4-6 and 9-11 are allowed.
- 9. Claims 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Response to Arguments

10. Applicant's arguments with respect to claims 17 and 22-24 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12 January 2005

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